L6 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:133817 CAPLUS
DN 132:162036
TI Preservation of **adenovirus** vector for gene therapy using formulations comprising **human serum albumin**
IN Shih, Shian Kiun; McGlennon, Karen R.; Moody, Dewey
PA Aventis Pharmaceuticals Products Inc., USA
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000009675	A1	20000224	WO 1999-US18515	19990813
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2340682	AA	20000224	CA 1999-2340682	19990813
	AU 9954858	A1	20000306	AU 1999-54858	19990813
	AU 748523	B2	20020606		
	EP 1109896	A1	20010627	EP 1999-941147	19990813
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2003528029	T2	20030924	JP 2000-565112	19990813
PRAI	US 1998-96600P	P	19980814		
	WO 1999-US18515	W	19990813		

AB The present invention relates to a formulation allowing the preservation of viral particles and viral vectors, which is directly injectable into an organism. It relates more particularly to a formulation for the preservation of a recombinant **adenovirus** vector that optimally enhances the vector **titer**, or **stabilizes** the vector at refrigerator or room temperature, or both. The invention relates to compns. comprising a recombinant **adenovirus** vector and a concentration of **human serum albumin** (HSA) effective to **stabilize** the **adenovirus** vector at a temperature above the f.p. of water or to enhance a **titer** of the **adenovirus** vector compared to a **titer** in the absence of HSA, or both, in an aqueous buffer.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:833498 CAPLUS
DN 135:355025
TI Use of serum albumin for inhibiting aggregation during filtration in virus vector preparation
IN Takashima, Shigemitsu; Heike, Yuji
PA Welfide Corporation, Japan
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001085928	A1	20011115	WO 2001-JP3877	20010509
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2001056675	A5	20011120	AU 2001-56675	20010509
	EP 1284287	A1	20030219	EP 2001-930008	20010509
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	JP 2000-137302	A	20000510		
	WO 2001-JP3877	W	20010509		

AB A method of preparing a virus vector by inhibiting aggregation involving the steps of (1) purifying a virus vector, and (2) sterilizing the purified vector obtained in the above (1) by filtering in the presence of serum albumin; and medicinal compns. containing a virus vector and serum albumin; are disclosed. Addition of serum albumin will result in inhibition of aggregation when carrying out filtration and thus **stabilization**. Use of ultracentrifuge, dialysis, and ion-exchange, is also claimed. **Adenovirus**, adeno-associated virus, retrovirus, herpes virus, or lentivirus vectors are used. Substantial reduction in aggregation upon filtration by the use of platelet derived and recombinant **human serum albumin** (HSA), bovine serum albumin (BSA), and FBS, in **adenovirus** vector preparation, was observed

L6 ANSWER 1 OF 9 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
AN 2003-26463 BIOTECHDS
TI Aqueous composition for ameliorating ocular diseases comprises an expression vector and a vector **stabilizing** agent e.g. albumin, sucrose or lactose;
Moloney murine leukemia virus-based retro virus, HIV virus-based lenti virus, adeno virus, adeno-associated virus, herpes virus and pseudotyped virus vector-mediated gene transfer and expression in mammal cell, cell culture and downstream processing for ocular disease gene therapy
AU GORDON E M; HALL F L
PA UNIV SOUTHERN CALIFORNIA
PI WO 2003077796 25 Sep 2003
AI WO 2003-US7918 14 Mar 2003
PRAI US 2002-364787 15 Mar 2002; US 2002-364787 15 Mar 2002
DT Patent
LA English
OS WPI: 2003-767440 [72]
AB DERWENT ABSTRACT:
NOVELTY - An aqueous composition comprises an expression vector and a vector **stabilizing** agent.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) method (M1) of stably storing an expression vector involving combining the expression vector with an ophthalmic solution comprising a vector **stabilizing** agent to maintain the potency of the vector; and (2) method (M2) of delivering an expression vector to mammal involving combining the expression vector with a vector **stabilizing** agent to maintain the potency of the vector.

BIOTECHNOLOGY - Preferred Components: The expression vector is a retroviral vector (preferably Moloney murine leukemia virus-based retroviral vector, human immunodeficiency virus-based lentiviral vector, an **adenoviral** vector, adeno-associated virus vector, herpes virus vector or pseudotyped virus) or a non-viral vector.

ACTIVITY - Ophthalmological. A composition (test) comprised (mg/l) sodium chloride (6400), potassium chloride (400), D-glucose (4500), L-arginine HCl (84), L-cysteine 2HCl (62.57), glycine (30), L-histidine HCl.H2O (42), L-isoleucine (104.8), L-leucine (104.8), L-lysine HCl (146.2), L-methionine (30), L-phenylalanine (66), L-serine (42), L-threonine (95.2), L-tryptophan (16), L-tyrosine 2Na.2H2O (103.79), L-valine (93.6), folic acid (4), inositol (7), nicotinic acid amide (4), riboflavin (0.4), thiamine HCl (4), ferric nitrate (0.1), sodium phosphate monobasic (125), pantothenic acid calcium salt (4), pyridoxine HCl (4), calcium chloride (anhydrous) (200), magnesium sulfate (anhydrous) (97.68), choline chloride (4), sodium bicarbonate (3700), pyruvic acid, Na salt (110), L-glutamine (20 ml/l) and **human serum albumin** (1.2 g/100 ml). Visine Tears (RTM) was used as a control. The vector potency of both the compositions were assessed using Gordon, E.M., et al., Cancer Res. 60: 3343-3347(2000); Xu F., et al. Int. J. Molec. Med. 8:19-30(2001). The results of viral **titer** (cfu/ml) for test/control were 2 x 10 to the power 6/4 x 10 to the power 4.

MECHANISM OF ACTION - None given.

USE - For ameliorating ocular diseases (claimed) (e.g. autosomal retinitis pigmentosa, retinal detachment); and for harvesting vectors from producer cell cultures and for downstream processing prior to and including final fill of cryovials, tubes, bags, ampoules or bottles and for post-fill storage.

ADMINISTRATION - Administration is topical or systemic (e.g. intravenous, intramuscular, subcutaneous, intraperitoneal, intravenous, intra-arterial, intranasal, sublingual, intrarectal, intrabladder, intravaginal, intracervical, transmembranous, oral, inhalation, sublingual or oral epithelial membrane delivery) to corneal keratocytes (all claimed). No dosage given.

ADVANTAGE - The composition is stable. The agent maintains the potency of the vector and inhibits eye irritation. The agent **stabilizes** the vector for at least 2 years/3 years/8 hours when the composition is stored at -80 degrees C/4 degrees C/room temperature respectively. The composition is compatible with both custom-designed and commercially available final fill and closure systems.

EXAMPLE - A composition comprised (mg/l) sodium chloride (6400), potassium chloride (400), D-glucose (4500), L-arginine HCl (84), L-cysteine 2HCl (62.57), glycine (30), L-histidine HCl.H2O (42), L-isoleucine (104.8), L-leucine (104.8), L-lysine HCl (146.2), L-methionine (30), L-phenylalanine (66), L-serine (42), L-threonine (95.2), L-tryptophan (16), L-tyrosine 2Na.2H2O (103.79), L-valine (93.6), folic acid (4), inositol (7), nicotinic acid amide (4), riboflavin (0.4), thiamine HCl (4), ferric nitrate (0.1), sodium phosphate monobasic (125), pantothenic acid calcium salt (4), pyridoxine HCl (4), calcium chloride (anhydrous) (200), magnesium sulfate (anhydrous) (97.68), choline chloride (4), sodium bicarbonate (3700), pyruvic acid, Na salt (110), L-glutamine (20 ml/l) and **human serum albumin** (1.2 g/100 ml). (12 pages)

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(FILE 'HOME' ENTERED AT 10:55:55 ON 16 FEB 2004)

     FILE 'MEDLINE, CANCERLIT, EMBASE, BIOSIS, CAPLUS, BIOTECHDS' ENTERED AT
     10:56:09 ON 16 FEB 2004
L1         34662 S HUMAN SERUM ALBUMIN
L2        117475 S ADENOVIR?
L3            42 S L2 AND L1
L4       3775366 S CONCENTRATION OR TITER OR STABIL?
L5            16 S L4 AND L3
L6             9 DUP REM L5 (7 DUPLICATES REMOVED)
L7          2065 S L1 AND STABIL?
L8            10 S L7 AND L2
L9             7 DUP REM L8 (3 DUPLICATES REMOVED)

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